GAME NO. 622
AUGUST, 1977

MIDWAY'S LAGUNA RACER PARTS CATALOG



MIDWAY MFG. CO.
A BALLY COMPANY
10750 WEST GRAND AVENUE
FRANKLIN PARK, ILLINOIS 60131
U.S.A.

PHONE: (312) 451-1360 CABLE ADDRESS: MIDCO TELEX NO.: 72-1596

TABLE OF CONTENTS

GENERAL INSTRUCTIONS FOR "LAGUNA RACER"

INSTALLATION:

1. Remove shipping cleats located on the bottom of the cabinet.
2. Install 4 provided leg levelers to bottom of cabinet and level cabinet.
3. The power is controlled by a switch located on top of the cabinet. Plug into A.C. only, 115 volts, 60 cycles. In low line areas (105 volts or less) a boost in the output voltage of the transformer may be obtained by removing the wire from the 115 volt tap of the transformer and rewiring to the 115 volt position.

VOLTAGE CONTROL POT:

Located on Power Supply Board (P.C. 0080-00904D) and is preset at the factory. This pot should not be tampered with unless the factory Service Dept. is contacted.

MASTER VOLUME CONTROL:

Located on Game Logic Boards (P. C. A084-90700-A622 or A084-90700-B622) and may be varied as desired. To increase all volumes, rotate pot clockwise. Clockwise direction defined as viewed from pot face.

COIN, TIME AND EXTENDED PLAY ADJUSTMENT SWITCHES:

Located on Game Logic Boards (P. C. A084-90700-A622 or A084-90700-B622) and may be adjusted as indicated on separate instructions located in back box area.

WARNING

THIS GAME MUST BE GROUNDED. FAILURE TO DO SO MAY RESULT IN DESTRUCTION TO ELECTRONIC COMPONENTS.

STEERING, ACCELERATOR AND SHIFT ALIGNMENT AND TEST PROCEDURES:

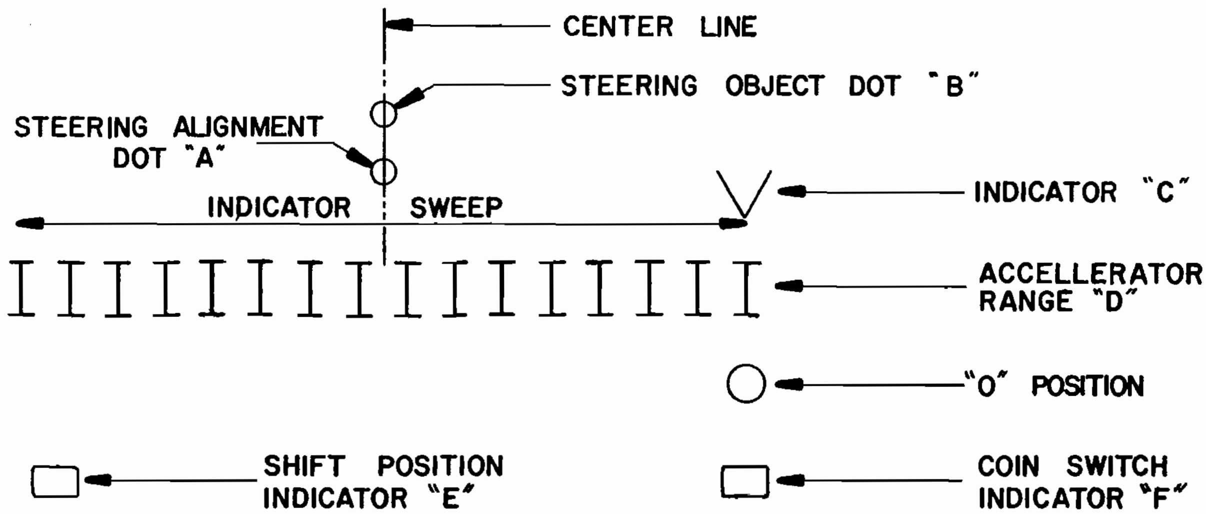
Place test switches 7 and 8 (located on Game Logic Boards P.C. A084-90700-A622 or A084-90700-B622) in test position (switch 7 on, switch 8 off.) Energize tilt switch to make alignment pattern appear.

1. STEERING ALIGNMENT:
   With the steering wheel at rest, align steering object dot "B" with steering alignment dot "A". This is accomplished by loosening 2 set screws on the steering pot, then rotate it as positions of dot "A" and "B" indicates. Tighten set screws. See sketch below.

2. ACCELLERATOR ADJUSTMENT:
   To adjust accellerator travel, loosen 2 set screws on accellerator pot. With the accellerator pedal at rest, rotate pot to align accellerator indicator "C" with position "0" of accellerator range "D". Tighten set screws; depress accellerator fully. The accellerator indicator should sweep from the first to last position of accellerator range "D". See sketch below.

3. SHIFT SWITCH TEST:
   To check shift switch, place shift in "Lo" position. If wired properly, shift position indicator "E" will read "Lo". Shift to "Hi" position. Shift position indicator will read "Hi". If the switch is defective, the shift indicator will always read "Hi". See sketch below.

4. COIN SWITCH TEST:
   Depress coin switch. Coin switch indicator "F" will read "ON". Release coin switch. Coin switch indicator "F" will read "OFF". If coin switch is shorted, the indicator will read "ON" regardless of switch position. If coin switch is open, the indicator will read "OFF" regardless of switch position. Place adjustment switches in original positions. Energize tilt switch to condition game to play mode.



ADJUSTMENT SWITCHES

METHOD OF PLAY

SW. 1	SW. 2	
ON	ON	1 COIN 1 PLAY
OFF	ON	1 COIN 2 PLAYS
ON	OFF	2 COINS 1 PLAY
OFF	OFF	2 COINS 3 PLAYS

TIME

SW. 3	SW. 4	
ON	ON	45 SEC. PER PLAY
OFF	ON	60 SEC. PER PLAY
ON	OFF	75 SEC. PER PLAY
OFF	OFF	90 SEC. PER PLAY

EXTENDED PLAY

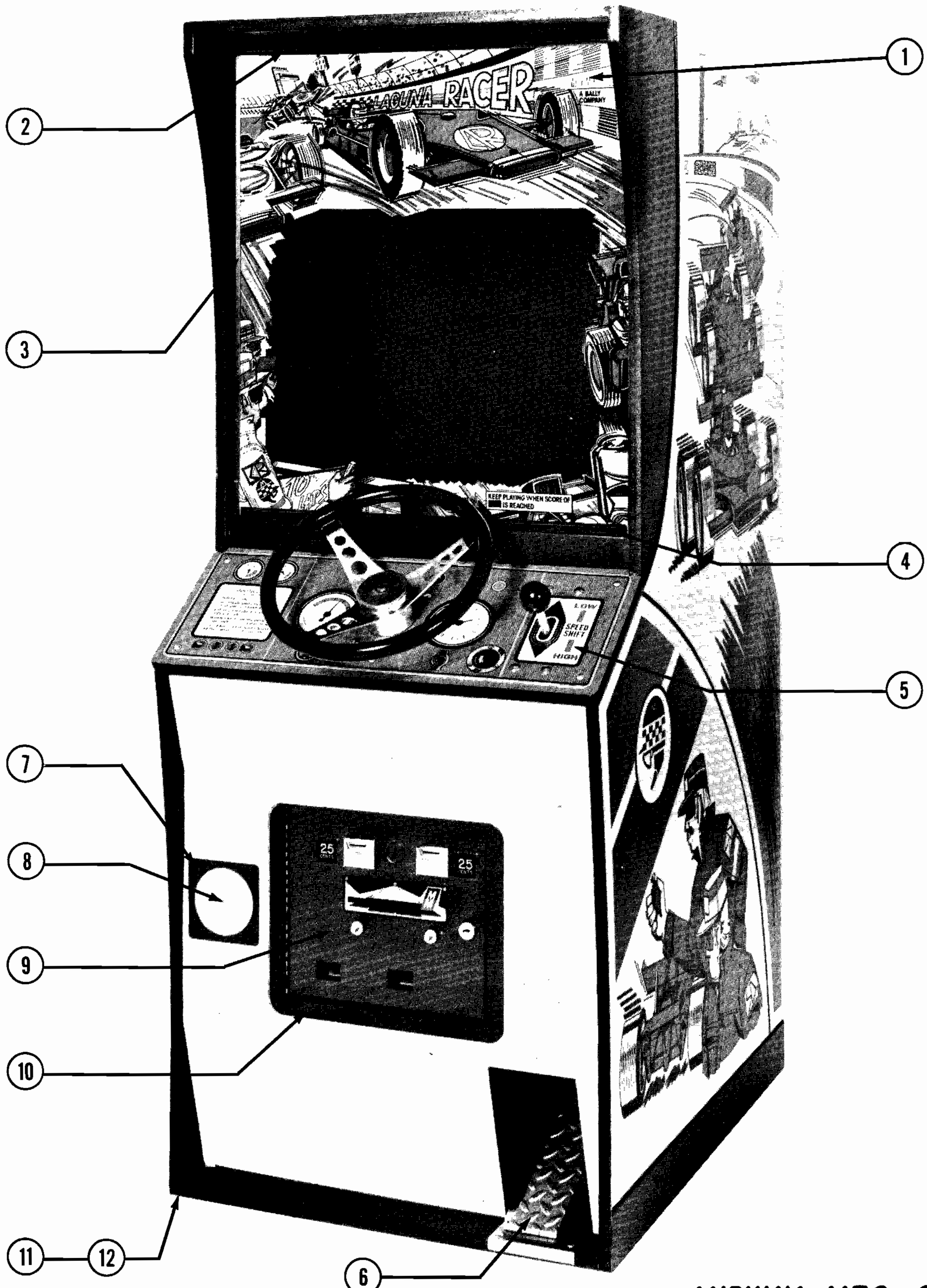
SW. 5	SW. 6	
ON	ON	EXTENDED PLAY AT 350
OFF	ON	EXTENDED PLAY AT 400
ON	OFF	EXTENDED PLAY AT 450
OFF	OFF	EXTENDED PLAY AT 500

PLAY – TEST

SW. 7	SW. 8	
ON	ON	PLAY MODE
OFF	ON	RAM/ROM TEST
ON	OFF	*STEERING, SHIFT, GAS TEST
OFF	OFF	NO EXTENDED PLAY

*FOR ADJUSTMENT PROCEDURES SEE GENERAL INSTRUCTION SHEET.

NO. 622 – LAGUNA RACER – PICTURE



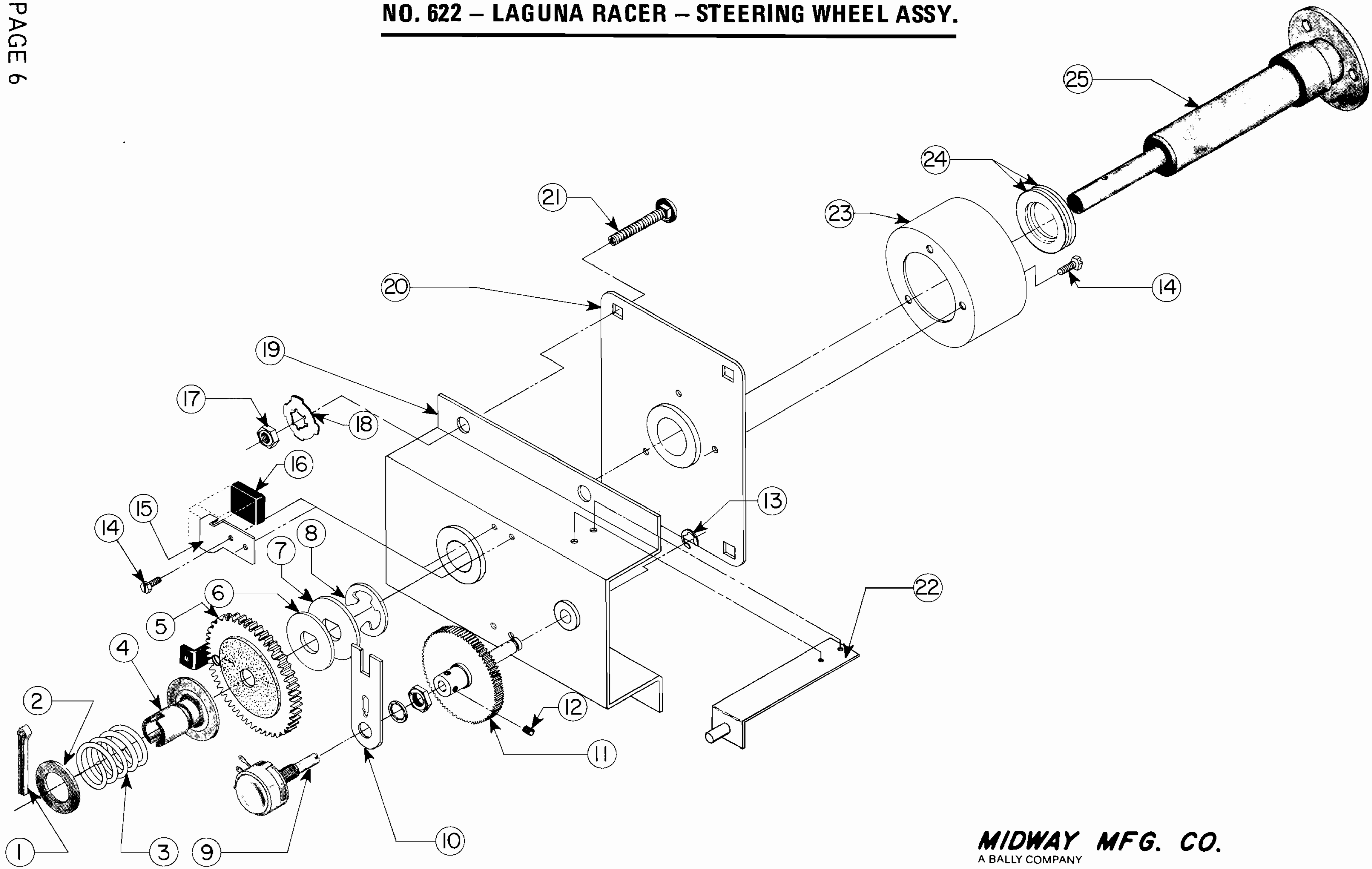
MIDWAY MFG. CO.
A BALLY COMPANY

NO. 622 – LAGUNA RACER – PICTURE

ORDER BY PART NUMBER ONLY

ITEM	PART Nº	DESCRIPTION
1	0622-00900-01SC	DISPLAY PLEX
2	0537-00903-3100	CYCOLAC EDGING
3	0537-00903-1800	CYCOLAC EDGING (2 REQ'D.)
4	0537-00138-0000	GLASS LIFT BRACKET
5	A622-00003-0000	CONTROL PANEL ASSY.
	0017-00102-0019	1/4 - 20 x 1-1/2 NICKEL PLATED CARRIAGE BOLTS (8 REQ'D.)
	0017-00104-0014	1/4 I.D. PERIPHERY WASHER (8 REQ'D.)
	0017-00103-0018	1/4 - 20 HEX NUT (8 REQ'D.)
6	0610-00013-0000	ACCELERATOR PEDAL ASSY.
7	0569-00001-00GR	SPEAKER BEZEL ASSY.
8	0549-00128-0000	SPEAKER GRILL
	0017-00003-0161	SPEAKER
	0017-00041-0576	SPEAKER GASKET
9	A090-00020-00GR	FRONT DOOR ASSY.
10	0090-00002-02GR	FRONT DOOR FRAME
11	0017-00102-0048	LEG LEVELERS (4 REQ'D.)
12	0017-00103-0026	LEG LEVELER NUTS (4 REQ'D.)
		NOT SHOWN LIST
	0017-00003-0189	23" MOTOROLA MONITOR
	0017-00101-0637	#8 - 32 x 1 CARRIAGE BOLTS (4 REQ'D.)
	0161-00100-0000	T.V. MOUNTING WASHER (4 REQ'D.)
	0017-00103-0061	#8 - 32 HEX NUT - SEM LOCK - (4 REQ'D.)
	0017-00009-0033	BASSICIC CLAMP (3 REQ'D.)
	A161-00002-0000	DAG SPRING ASSY.
	3000-17155-0000	GROUND STRAP
	0592-00104-0100	CHASSIS MOUNTING BRKT.
	0592-00104-0200	CHASSIS MOUNTING BRKT.
	0017-00104-0022	STEEL WASHER (4 REQ'D.)
	0017-00101-0028	#8 x 3/4 HX. HD. BLK. S.M.S. (6 REQ'D.)
	0623-00011-0000	GLASS LOCK BRKT. (2 REQ'D.)
	0622-00903-0000	MIRROPANE MIRROR - 24-3/4" x 32-5/8"
	0622-00105-0000	MIRROR RETAINER BRKT.
	0017-00101-0018	#6 x 3/4 HEX. HD. BLK. S.M.S. (6 REQ'D.)
	0622-00904-0000	BACKGROUND SCENERY
	0622-00905-0100	SIDE PANEL SCENERY - RIGHT
	0622-00905-0200	SIDE PANEL SCENERY - LEFT
	0622-00901-0000	TUBE MASK

NO. 622 – LAGUNA RACER – STEERING WHEEL ASSY.



MIDWAY MFG. CO.
A BALLY COMPANY

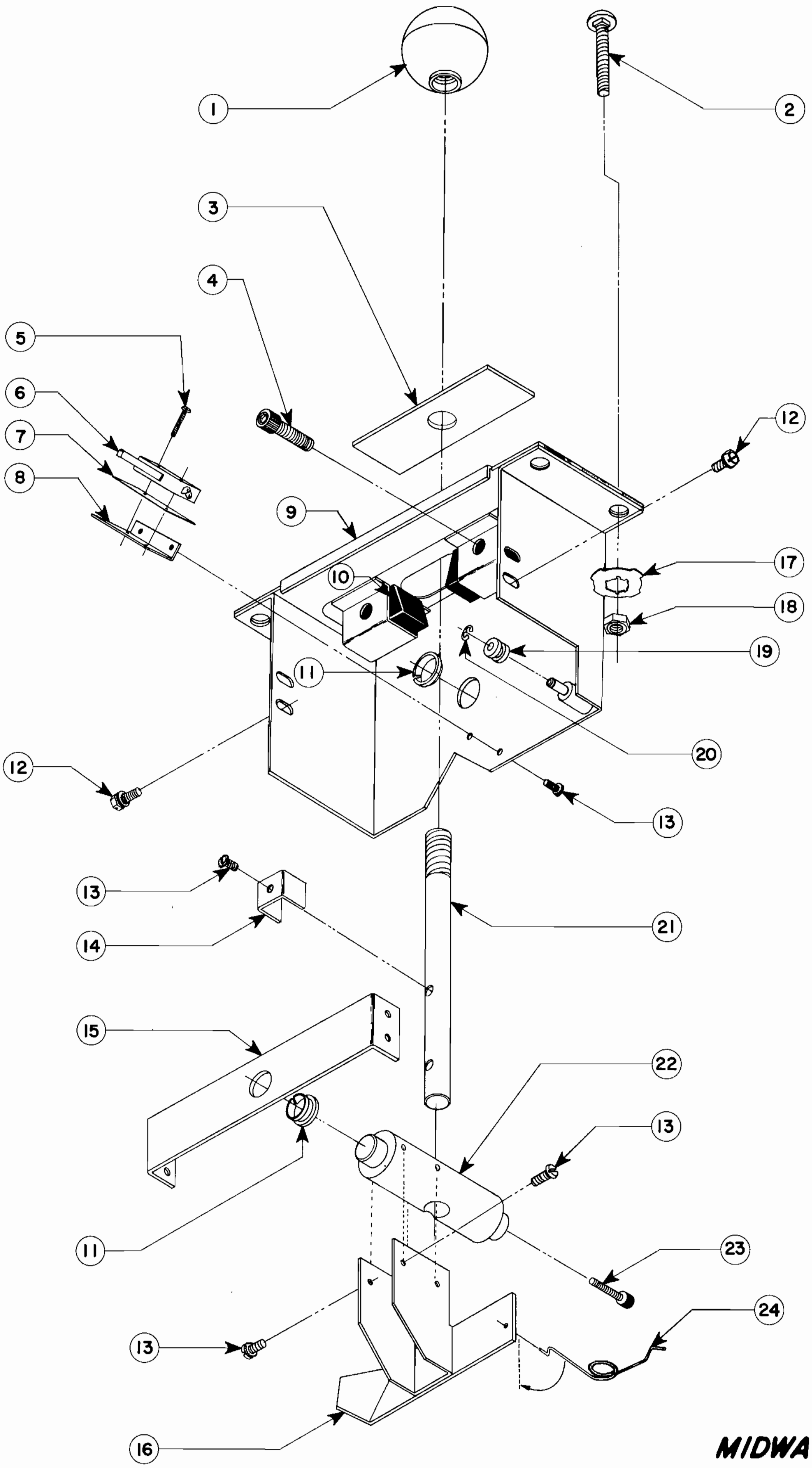
NO. 622 – LAGUNA RACER – STEERING WHEEL ASSY.

ORDER BY PART NUMBER ONLY

ITEM	PART Nº	DESCRIPTION
1	0017-00007-0045	1/8 x 1-1/4 COTTER PIN
2	0017-00104-0054	FLAT WASHER
3	0010-00582-0000	COMPRESSION SPRING
4	0610-00015-0000	CLUTCH WASHER & BUSHING ASSY.
5	0622-00106-0000	STEERING WHEEL GEAR
6	0622-00107-0000	NYLON CLUTCH WASHER
7	0610-00129-0000	CLUTCH WASHER
8	0017-00100-0087	7/8 "E" - RING
9	0063-277DX-1GFX	25K - POT
10	0591-00105-0010	POT - LOCATOR
11	0591-00003-0000	SHAFT & GEAR SUB ASSY.
12	0017-00101-0308	#8 - 32 x 3/16 SET SCREWS (2 REQ'D.)
13	0017-00100-0031	"E" - RING
14	0017-00101-0555	#6 x 5/16 HEX. HD. S.T.S. (7 REQ'D.)
15	0610-00110-0000	RUBBER PAD BRACKETS (2 REQ'D.)
16	0610-00906-0000	RUBBER PADS (2 REQ'D.)
17	0017-00103-0018	1/4 - 20 HEX NUT (4 REQ'D.)
18	0017-00104-0014	PERIPHERY WASHER (4 REQ'D.)
19	0610-00008-0000	MAIN MTG. BRKT. SUB ASSY.
20	0610-00016-0000	FRONT MOUNTING PLATE ASSY.
21	0017-00102-0019	CARRIAGE BOLTS - 1/4 - 20 x 1-1/2 (4 REQ'D.)
22	0610-00007-0000	BRACKET & POST SUB ASSY.
23	0552-00119-0000	STEERING POST SHIELD
24	0610-00111-0000	NYLON WASHER (2 REQ'D.)
25	0610-00006-0000	SHAFT & HUB ASSY. TO STEERING WHEEL
		<u>NOT SHOWN LIST</u>
	0017-00009-0418	STEERING WHEEL
	0017-00102-0002	1/4 - 20 x 1/2 SLOT HEX H.M.S. (3)
	0610-00114-0000	SPRING BRACKET
	0010-00242-0000	CENTERING SPRING
	0017-00042-0097	NYLINER - 8L2FF
	0622-00010-00SC	SCREENED CONTROL PLATE
	0622-00010-0000	STEERING WHEEL UNIT ASSY. - COMPLETE

MIDWAY MFG. CO.

NO. 622 – LAGUNA RACER – GEAR SHIFT ASSY.



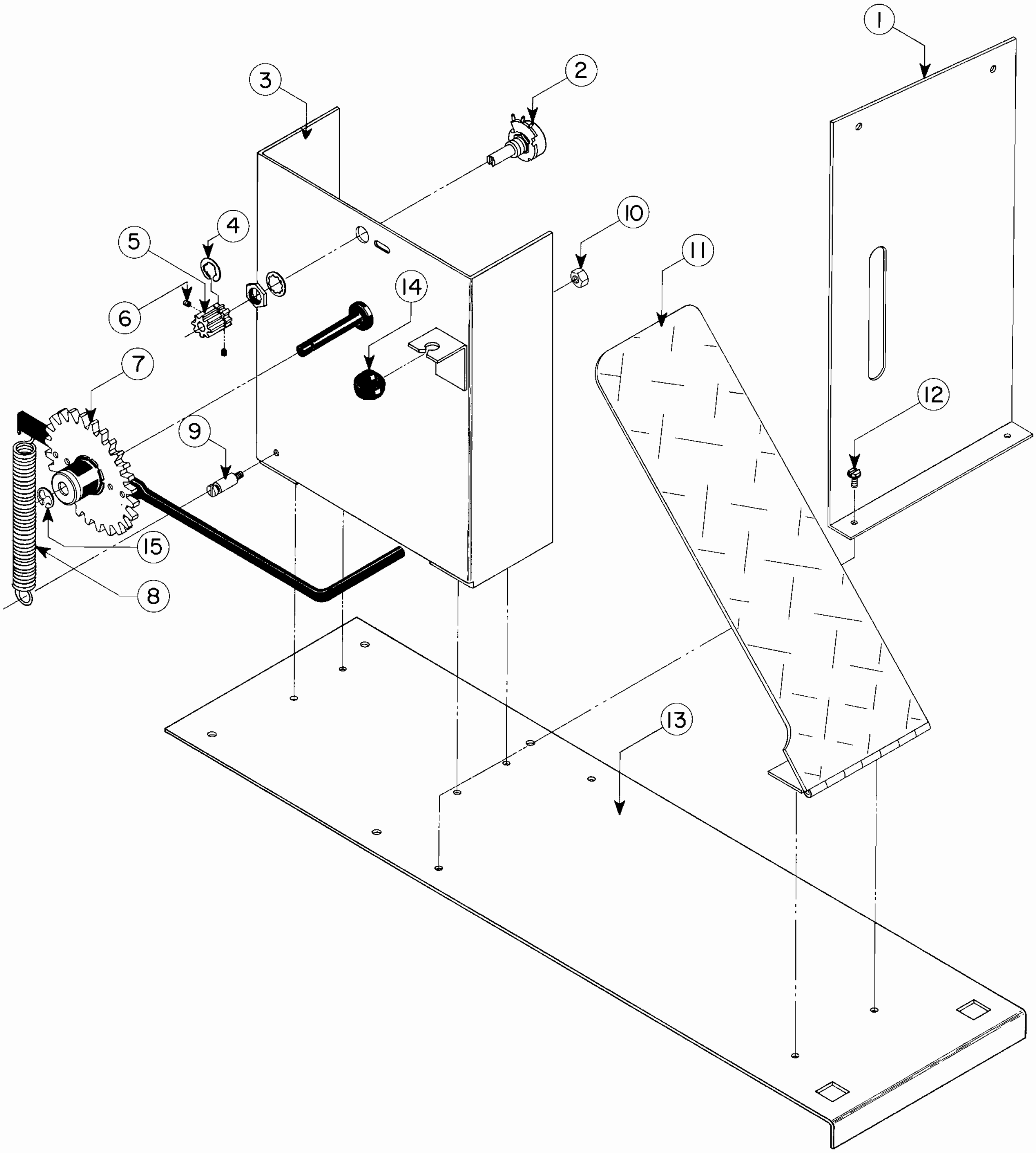
MIDWAY MFG. CO.
A BALLY COMPANY

NO. 622 – LAGUNA RACER – GEAR SHIFT ASSY.

ORDER BY PART NUMBER ONLY

ITEM	PART №	DESCRIPTION
1.	0017-00009-0386	KNOB
2	0017-00102-0019	CARRIAGE BOLTS 1/4 - 20 x 1-1/2 (4 REQ'D.)
3	0591-00902-0000	SLIDE
4	0017-00102-0065	5/16 x 18 x 3/4" LONG SOCKET HD. CAP SCREW (2)
5	0017-00101-0510	#4 - 40 x 1/2 PAN HD. M.S. (2 REQ'D.)
6	0017-00032-0006	MICRO SWITCH
7	0588-00911-0000	INSULATOR
8	0610-00123-0000	SWITCH MOUNTING BRACKET
9	0610-00001-0000	CONTROL HOUSING WELDING ASSY.
10	0544-00907-0000	RUBBER BUMPER (2 REQ'D.)
11	0017-00042-0021	NYLINER (2 REQ'D.)
12	0017-00101-0598	#8 - 32 x 5/16 HEX HD. S.T. M.S. (4 REQ'D.)
13	0017-00101-0593	#8 - 32 x 1/4 PAN HD. M.S. SEMS (7 REQ'D.)
14	0591-00127-0000	"U" BRACKET
15	0610-00102-0000	REARING SUPPORT PLATE
16	0610-00009-0000	BRACKET & PLATE ASSY.
17	0017-00104-0014	PERIPHERY WASHER (4 REQ'D.)
18	0017-00103-0018	1/4 - 20 HEX NUT (4 REQ'D.)
19	0591-00702-0000	SPRING ROLLER
20	0017-00100-0015	"E" RING
21	0610-00703-0000	GEAR SHIFT ROD
22	0610-00704-0000	PIVOT BUSHING
23	0017-00101-0720	#10 - 32 x 3/4 LOCKING SOCKET CAP SCREW
24	0010-00227-0000	TORSION SPRING
	0610-00010-0000	GEAR SHIFT ASSY. – COMPLETE

NO. 622 – LAGUNA RACER – ACCELERATOR PEDAL ASSY.



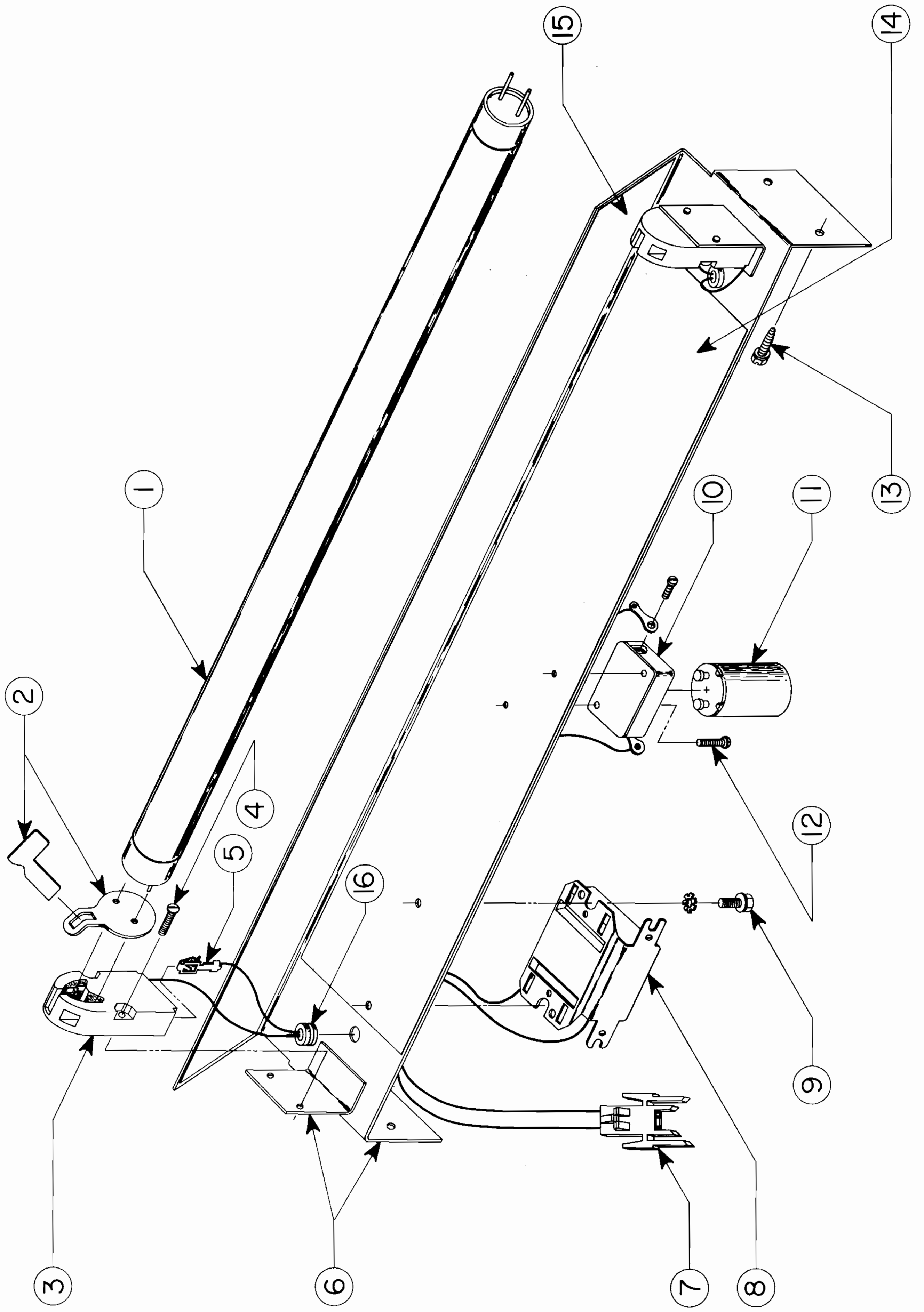
MIDWAY MFG. CO.
A BALLY COMPANY

NO. 622 – LAGUNA RACER – ACCELERATOR PEDAL ASSY.

ORDER BY PART NUMBER ONLY

ITEM	PART Nº	DESCRIPTION
1	0610-00112-0000	ACCELERATOR PEDAL COVER PLATE (1)
2	0063-277DX-1GFX	25K POT (1)
3	0610-00004-0000	MOUNTING BRACKET ASSY. (1)
4	0017-00100-0050	"E" RING (FOR POT GEAR) (1)
5	0583-00723-0000	GEAR (1)
6	0017-00101-0308	#8 - 32 x 3/16 SOCKET SET SCREW (2)
7	0610-00003-0000	GEAR & LEVER ASSY. (1)
8	0010-00228-0000	SPRING (1)
9	0011-00100-0500	STUD (1)
10	0017-00103-0011	#10 - 32 LOCK NUT
11	0610-00002-0000	ACCELERATOR PEDAL & HINGE ASSY.
12	0017-00101-0597	#8 x 5/16 HEX HEAD S.T. SCREW (8)
13	0610-00116-0000	CONTROL MTG. BRKT. (1)
14	0017-00041-0015	RUBBER BUMPER (1)
15	0017-00100-0031	"E" RING
	0610-00013-0000	ACCELERATOR PEDAL UNIT COMPLETE

NO. 620 – LAGUNA RACER – FLUORESCENT FIXTURE ASSY.

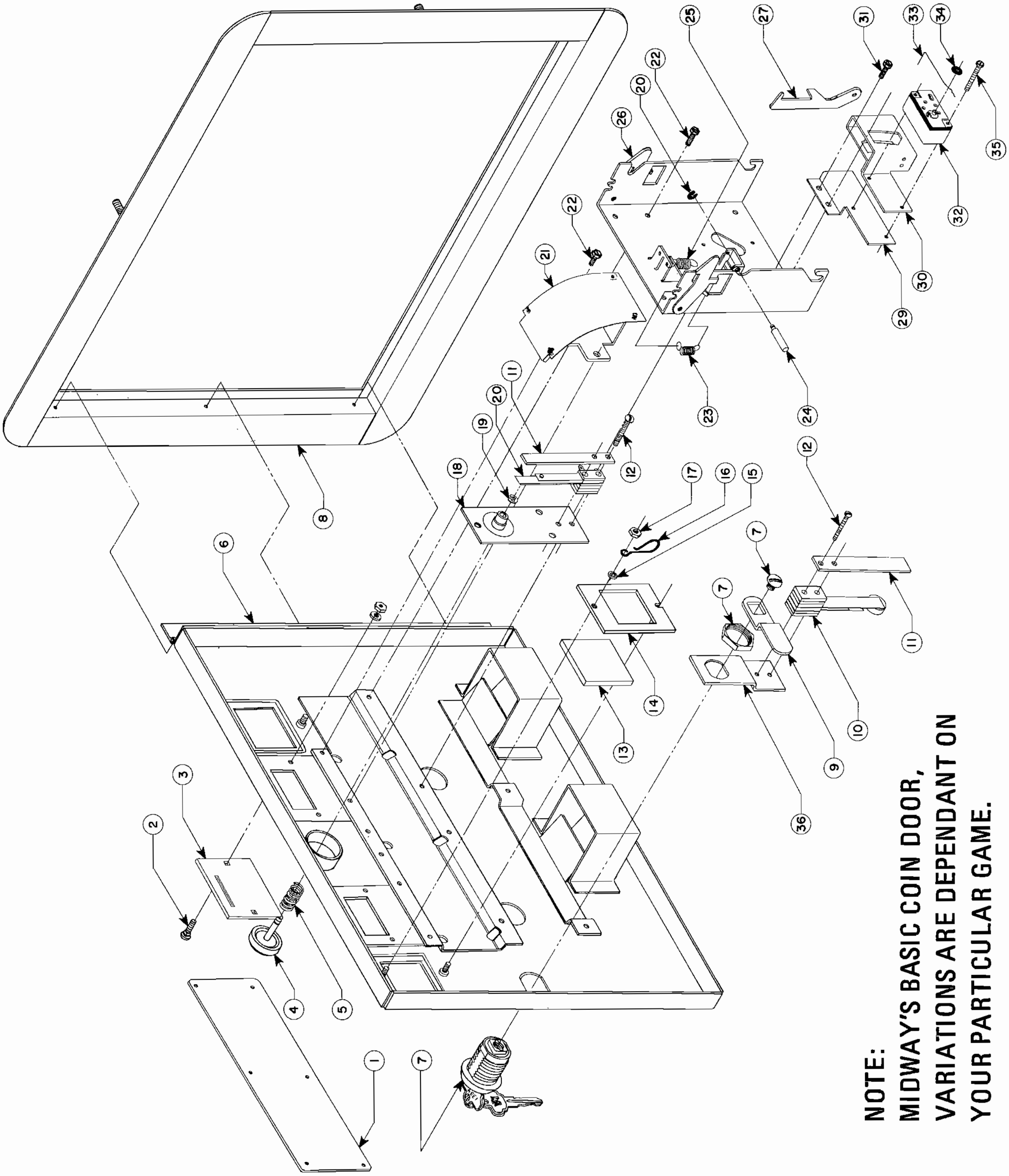


NO. 620 – LAGUNA RACER – FLUORESCENT FIXTURE ASSY.

ORDER BY PART NUMBER ONLY

ITEM	PART №	DESCRIPTION
1	0017-00003-0110	24" FLUORESCENT LAMP
2	0017-00021-0005	FLUOR. LOCKS (2 REQ'D.)
3	0017-00031-0015	LAMP HOLDERS (2 REQ'D.)
4	0017-00101-0521	#5 - 40 x 3/8 BINDER HD. M.S. (4 REQ'D.)
5	0017-00021-0078	BRASS FLUOR. TERM
6	0605-00007-0000	FLUORESCENT BRKT. ASSY.
7	0017-00021-0096	2 TERMINAL JACK - FEMALE
8	0017-00003-0026	BALLAST
9	0017-00101-0593	#8 - 32 x 1/4 PAN HD. EXT. S.M.S. (2 REQ'D.)
10	0017-00021-0079	STARTER HOLDER
11	0017-00003-0019	STARTER
12	0017-00101-0528	#5 - 40 x 3/4 R.H. M.S. (2 REQ'D.)
13	0017-00101-0017	#6 x 1/2 HEX. HD. W/W BLK. S.M.S. (4 REQ'D.)
14	0605-00910-0100	REFLECTOR STRIP - 21-1/4" LONG
15	0605-00910-0200	REFLECTOR STRIP - 24-1/2" LONG
16	0017-00041-0013	GROMMETS (2 REQ'D.)
	0605-00010-0000	FLUORESCENT ASSY. - COMPLETE

NO. 622 – LAGUNA RACER – FRONT DOOR ASSY.



NOTE:
MIDWAY'S BASIC COIN DOOR,
VARIATIONS ARE DEPENDANT ON
YOUR PARTICULAR GAME.

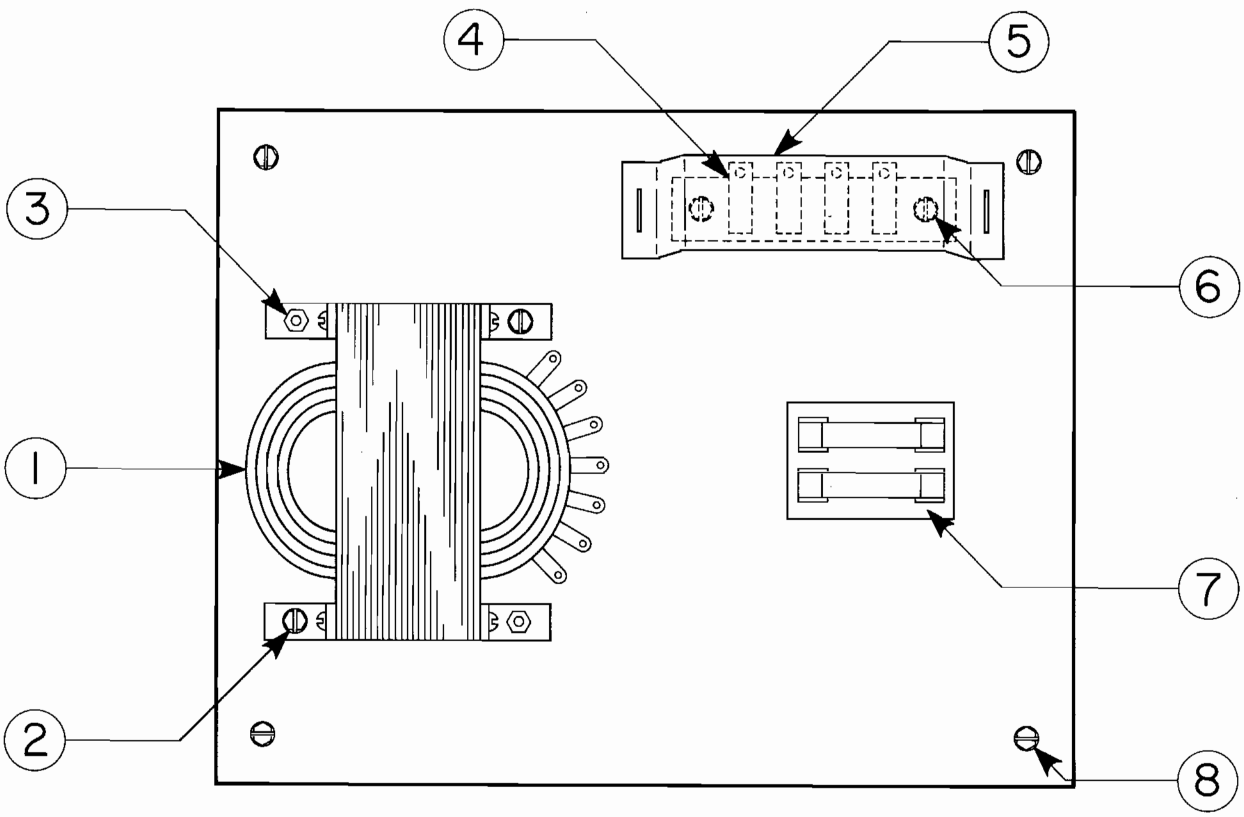
NO. 622 – LAGUNA RACER – FRONT DOOR ASSY.

ORDER BY PART NUMBER ONLY

ITEM	PART Nº	DESCRIPTION
1	0090-00902-0000	DRESS PLATE
	0090-00902-0100	DRESS PLATE (W/O PRESS BUTTON TO START GAME)
2	0017-00101-0552	6-32 x 1/4 CARRIAGE BOLT (2)
3	0090-00117-0003	COIN ENTRY PLATE (25¢)
4	0090-00906-0000	PLASTIC START BUTTON
5	0010-00007-0000	COMPRESSION SPRING
6	0090-00013-0200	DOOR ASSY. DOUBLE ENTRY
7	0017-00005-0050	DOOR LOCK & KEY WITH SCREW & NUT
8	0090-00002-02BR	DOUBLE DOOR FRAME
9	0017-00005-0041	421 N.S. CAM
10	0090-00901-0000	DOOR SWITCH
11	0090-00126-012N	SWITCH BACKUP PLATE
12	0017-00101-0528	5-40 x 3/4" LNG. M.S.
13	0090-00903-0040	25¢ WINDOW
14	0090-00143-0000	COIN PLEX RETAINER
15	0017-00104-0002	SPLIT LOCK WASHER
16	0017-00007-0019	KEY HOOK
17	0017-00103-0005	6-32 HEX NUT
18	0090-00010-0000	SW. PLATE & OILLITE ASSY.
19	0017-00100-0018	"E" RING
20	0090-00131-0000	SWITCH
21	0090-00104-0000	TOP & BTM. COIN CHUTE W/BRKT. ASSY.
22	0017-00101-0598	8-32 x 5/16 SCREW
23	0010-00181-0100	SPRING
24	0090-00129-0000	PIVOT POST
25	0010-00134-0000	SPRING
26	0090-00008-0000	ACCEPTOR FRAME ASSY.
27	0093-00155-0000	REJECTOR LEVER
28	0017-00100-0012	"E" RING
29	0093-00151-0000	COIN GUIDE MTG. BRACKET
30	0090-00005-0000	COIN GUIDE ASSY.
31	0017-00101-0555	6-32 x 5/16 SCREW
32	0017-00005-0039	COIN SWITCH
33	0010-00557-0025	TRIP WIRE
34	0017-00007-0132	PUSH-ON RING (BIK)
35	0017-00101-0507	#4-36 x 3/4 SCREW

MIDWAY MFG. CO.

NO. 622 – LAGUNA RACER – TRANSFORMER BOARD ASSY.



NO. 622 – LAGUNA RACER – TRANSFORMER BOARD ASSY.

ORDER BY PART NUMBER ONLY

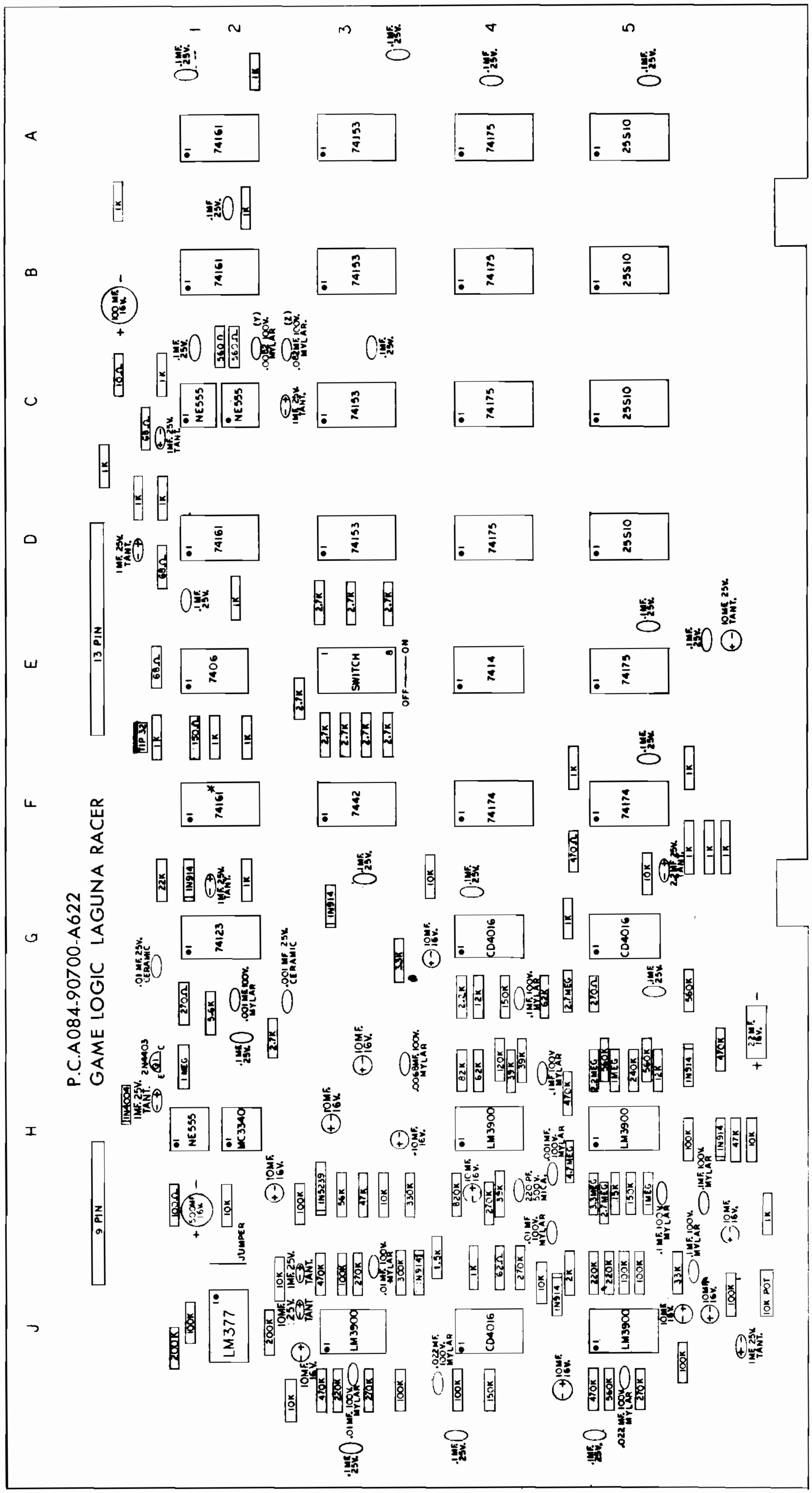
ITEM	PART Nº	DESCRIPTION
1	00MT-0058A-0000	TRANSFORMER - 60 CYCLE OR
	00MT-0059A-0000	TRANSFORMER - 50 CYCLE - FOREIGN
2	0017-00101-0025	#8 x 1/2 SLOT HEX HD. S.M.S. (2 REQ'D.)
3	0017-00101-0692	#8 - 32 x 7/8 CARRIAGE BOLTS (2 REQ'D.)
	0017-00103-0008	#8 - 32 HEX NUT (2 REQ'D.)
4	0031-00001-0000	TERMINAL STRIP ASSY.
5	0618-00122-0000	FISHPAPER SHIELD
6	0017-00101-0017	#6 x 1/2 HEX. HD. S.M.S. (6 REQ'D.)
7	0720-00001-0000	FUSE BLOCK ASSY.
8	0017-00101-0030	#8 x 1" HEX HD. WOOD SCREW (4 REQ'D.)

NO. 622 – LAGUNA RACER – ADDITIONAL PARTS LIST

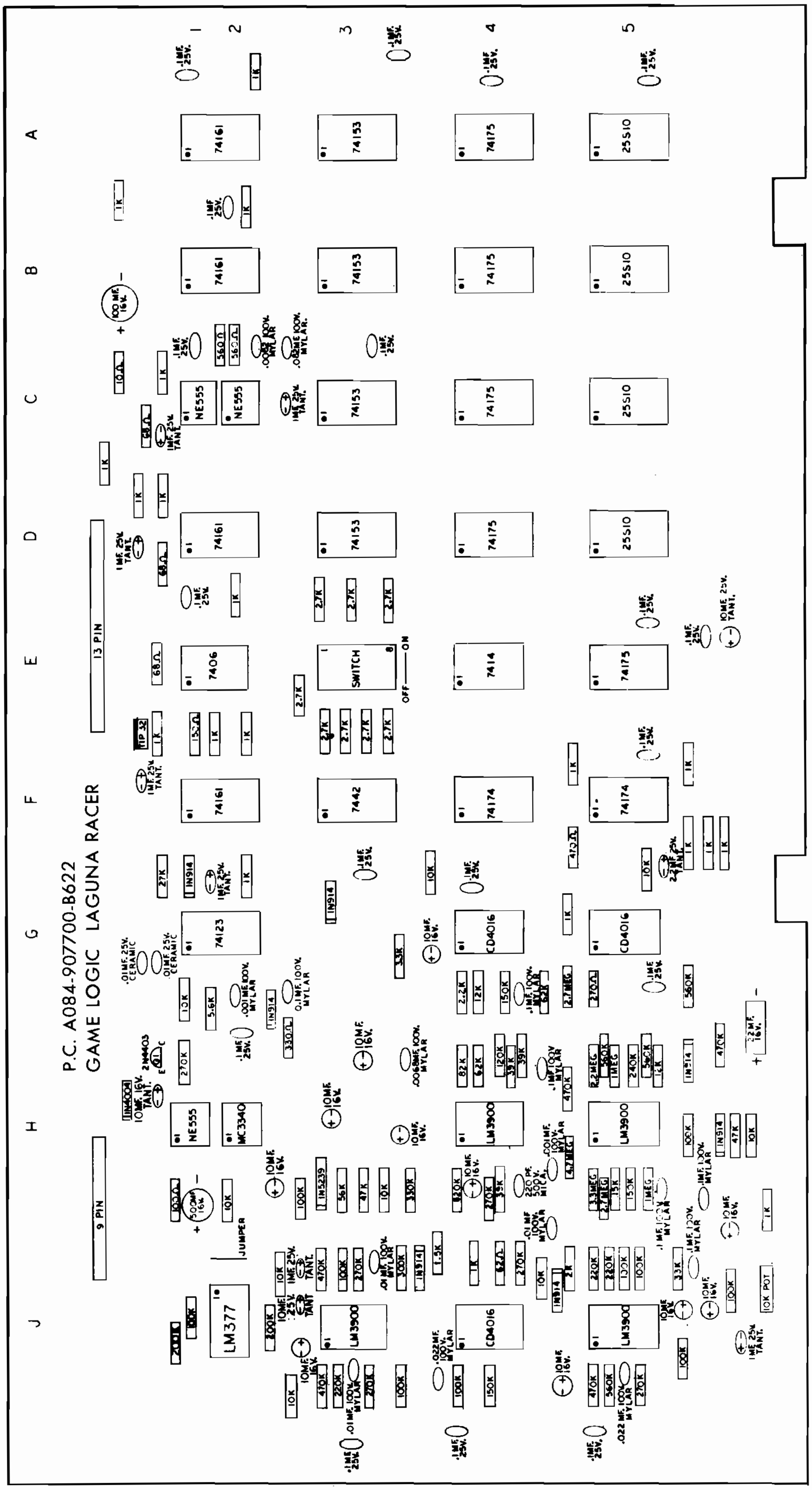
ORDER BY PART NUMBER ONLY

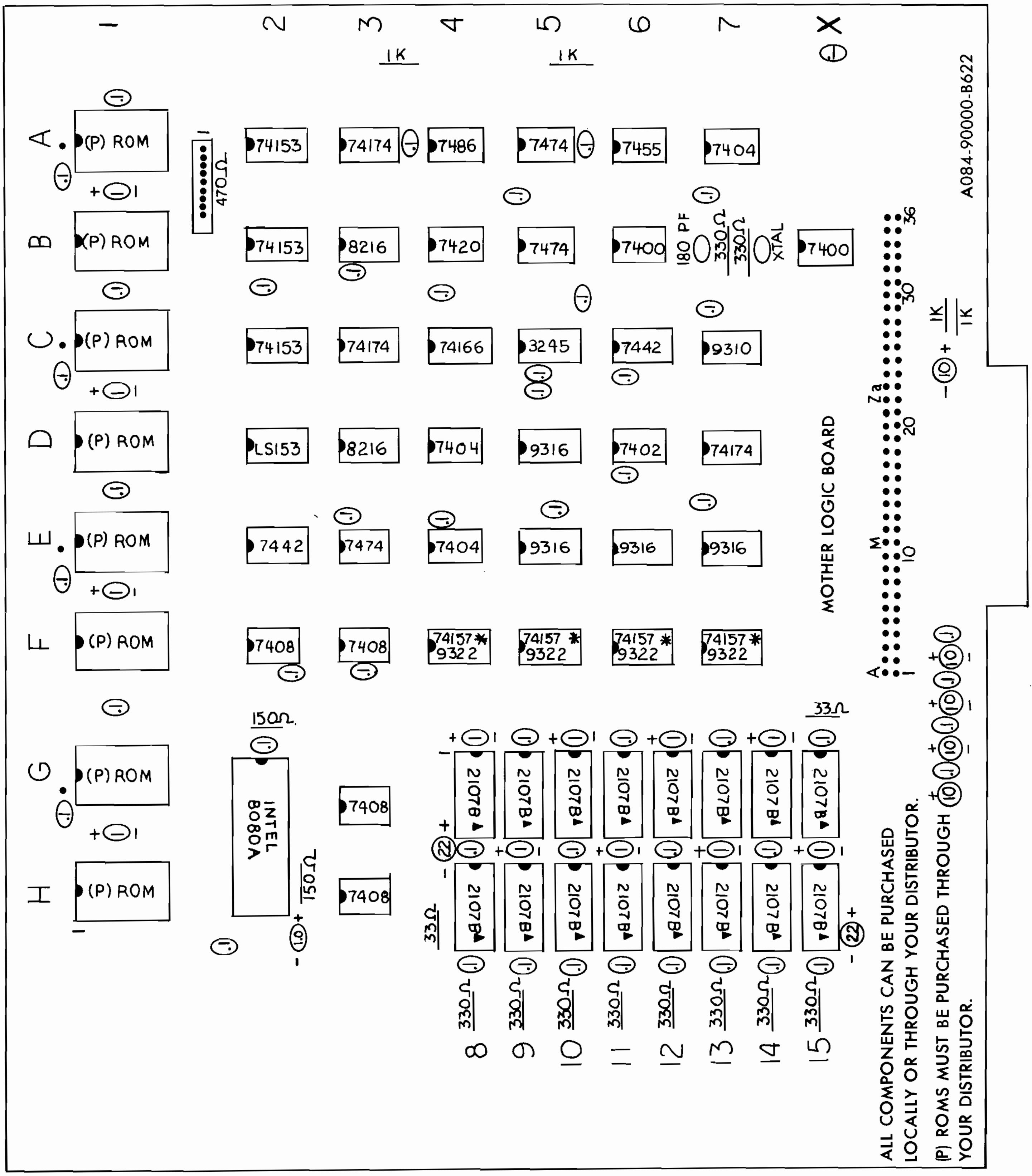
ITEM	PART №	DESCRIPTION
	0017-00009-0009	TURN BUTTON (2 REQ'D.)
	A622-00006-0000	UPPER BACK DOOR ASSY.
	A622-00007-0000	LOWER BACK DOOR ASSY.
	0017-00003-0102	COUNTER METER - ON COIN DOOR
	0622-00101-0000	COIN BOX
	A622-00004-0000	COIN BOX COVER ASSY.
	A622-00005-0000	COIN BOX GUIDE BRKT. ASSY.
	0622-00103-0000	COIN BOX GUIDE BRKT.
	0017-00101-0628	#8 - 32 x 3/4 CARRIAGE BOLTS (4 REQ'D.)
	0017-00104-0022	STEEL WASHER (4 REQ'D.)
	0017-00103-0008	#8 - 32 HEX NUT (4 REQ'D.)
	0605-00107-0000	FISHPAPER BARRIER
	0017-00003-0052	LAMPS (5 REQ'D.)
	0017-00031-0002	SOCKETS (5 REQ'D.)
	A084-90000-B622	MOTHER BOARD ASSY.
	A084-90700-B622	GAME BOARD ASSY.
	A622-00008-0000	MOTHER & GAME BOARD ASSY.
	0017-00101-0517	#5 - 40 x 1/4 PAN HD. M.S. (8 REQ'D.)
	A622-00012-0000	TRANSFORMER BOARD ASSY.
	0080-00904-D000	POWER SUPPLY BRD.
	0567-00003-0100	P.C. MTG. BRKT. ASSY. - RIGHT HAND
	0567-00003-0200	P.C. MTG. BRKT. ASSY. - LEFT HAND
	0623-00906-0100	P.C. SUPPORT BRKT. - 12" (3 REQ'D.)
	0623-00906-0300	P.C. SUPPORT BRKT. - SMALL (2 REQ'D.)
	0017-00101-0025	#8 x 1/2 HEX HD. WOOD SCREWS (14 REQ'D.)

MIDWAY MFG. CO.



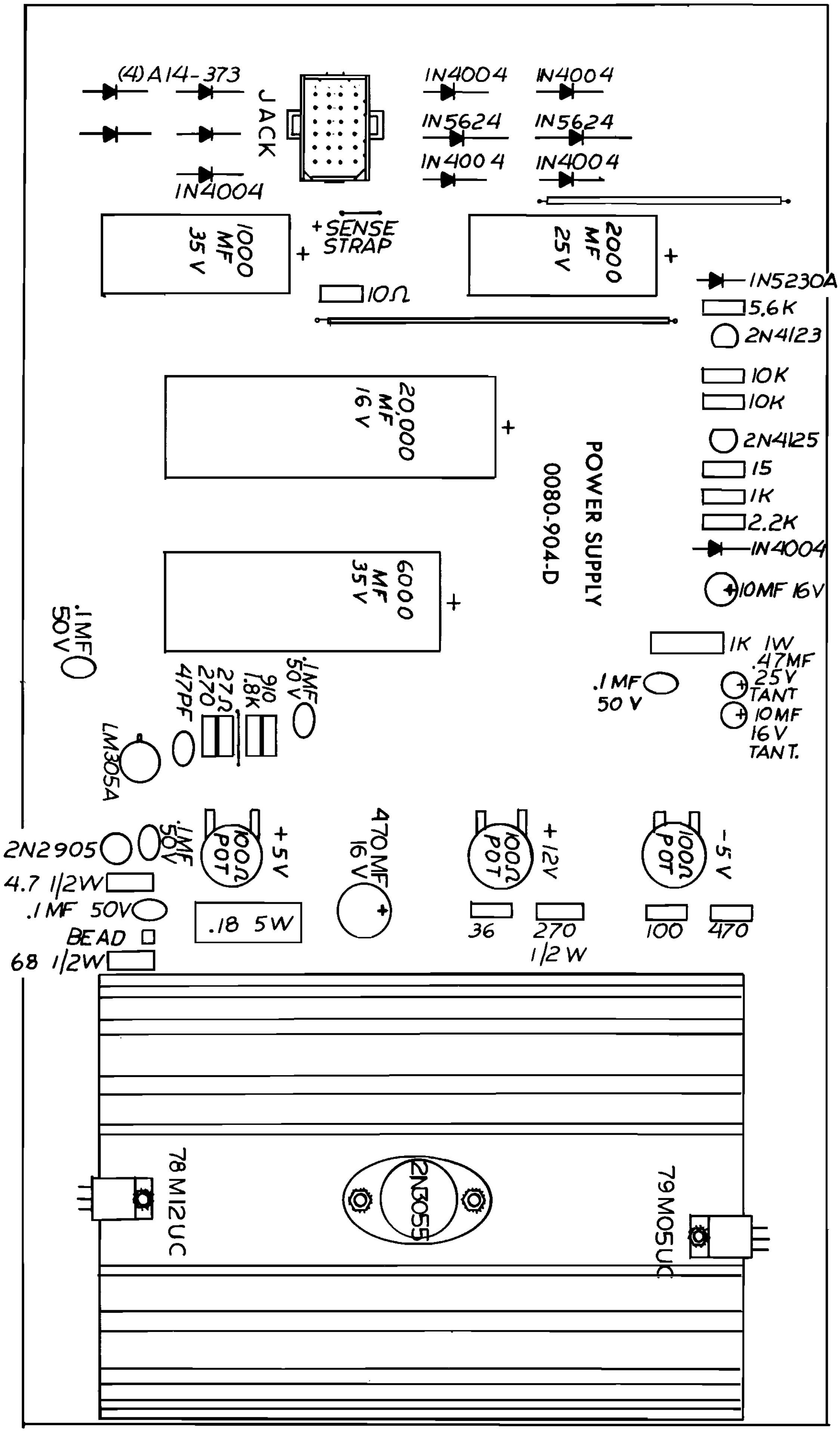
P.C.A084-90700-A622
GAME LOGIC LAGUNA RACER
13 PIN
9 PIN
74161
74153
74175
25S10
NE555
7406
SWITCH
OFF ON
7414
7442
74174
74123
CD4016
MC3340
LM3900
LM377
JUMPER
10K POT

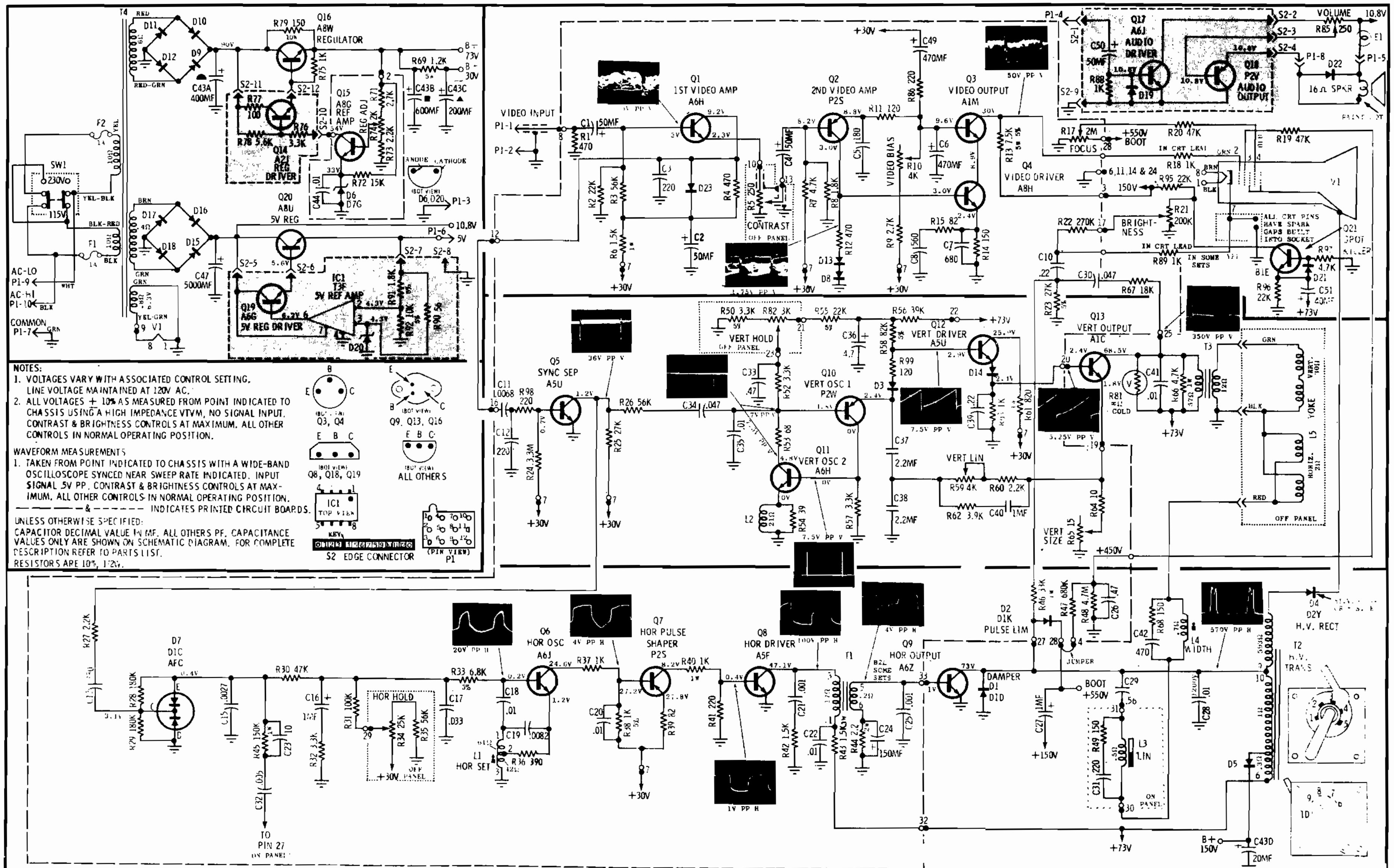

P.C. A084-907700-B622
GAME LOGIC LAGUNA RACER



ALL COMPONENTS CAN BE PURCHASED LOCALLY OR THROUGH YOUR DISTRIBUTOR.

(P) ROMS MUST BE PURCHASED THROUGH YOUR DISTRIBUTOR.


(4) A14-373
JACK
IN4004
IN4004
IN4004
IN5624
IN5624
IN4004
IN4004
IN4004
1000 MF 35 V
+SENSE STRAP
10Ω
2000 MF 25V
IN5230A
5.6K
2N4123
20,000 MF 16 V
10K
10K
2N4125
15
1K
2.2K
IN4004
10MF 16V
POWER SUPPLY
0080-904-D
6000 MF 35 V
.1 MF 50V
.1MF 50V
910
1.8K
27Ω
270
47PF
LM305A
1K 1W
.1 MF 50 V
.47MF 25V TANT
10 MF 16 V TANT.
2N2905
.1MF 50V
100Ω POT
+5 V
470MF 16 V
100Ω POT
+12V
100Ω POT
-5 V
4.7 1/2W
.1 MF 50V
BEAD
68 1/2W
.18 5W
36
270 1/2 W
100
470
78M12UC
2N3055
79M05UC



Schematic Diagram

XM-702-10

NOTES

This space is provided for personal notes